

3 f1) determining whether a first combined cut/boost of
4 the first equalizer band and the second equalizer band is too
5 great;

6 f2) determining whether a second combined cut/boost of
7 the second equalizer band and the third equalizer band is too
8 great; and

9 f3) determining whether a third combined cut/boost of
10 the first equalizer band and the third equalizer band is too
11 great.

12 13. (amended) A computer program product for use in
13 conjunction with a computer system, the computer program
14 product comprising a computer readable storage medium and a
15 computer program mechanism embedded therein, the computer
16 program mechanism comprising one or more modules to improve
17 audio quality of the computer system, the one or more modules
18 including:

19 a first set of instructions to determine a type of a
20 Universal Serial Bus (USB) speaker of the computer system;

21 a second set of instructions to select a set of filter
22 coefficients for a digital filter based upon the type of the
23 USB speaker; and

24 a third set of instructions to realize a parametric
25 equalizer using a digital filter, the digital filter producing
26 an output signal to be input to the USB speaker from the set
27 of filter coefficients and an input signal..

28 14. (amended) The computer program product of claim 13
29 wherein the second set of instructions further include:

30 a fourth set of instructions to receive equalizer
31 parameters; and

32 a fifth set of instructions to calculate the set of
33 filter coefficients from the equalizer parameters if received
34 without regard to the type of the speaker.

1 15. (amended) The computer program product of claim 13
2 wherein the third set of instructions comprise:
3 a seventh set of instructions to realize a first
4 equalizer band of the parametric equalizer, the first
5 equalizer band having a first cut/boost parameter;
6 an eighth set of instructions to realize a second
7 equalizer band of the parametric equalizer, the second
8 equalizer band having a second cut/boost parameter; and
9 a ninth set of instructions to realize a third equalizer
10 band of the parametric equalizer, the third equalizer band
11 having a third cut/boost parameter.

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1 16. (amended) The computer program product of claim 15
2 wherein a tenth set of instructions for insuring a first
3 combined cut/boost of the first, second and third equalizer
4 bands is not too great.

1 17. (amended) The computer program product of claim 16
2 wherein the tenth set of instructions comprise:
3 an eleventh set of instructions to determine whether a
4 second combined cut/boost of the first equalizer band and the
5 second equalizer band is too great;
6 a twelfth set of instructions to determine whether a
7 third combined cut/boost of the second equalizer band and the
8 third equalizer band is too great; and
9 a thirteenth set of instructions to determine whether a
10 fourth combined cut/boost of the first equalizer band and the
11 third equalizer band is too great.

1 18. (amended) The computer program product of claim 17
2 wherein:
3 the eleventh set of instructions uses a relationship for
4 adjacent bands to determine whether the second combined
5 cut/boost is too great;

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the twelfth set of instructions uses the relationship for
adjacent bands to determine whether the third combined
cut/boost is too great; and

the thirteenth set of instructions uses a relationship
for non-adjacent bands to determine whether the fourth
combined cut/boost is too great.
